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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/549,513	09/20/2005	Fiorenzo Draghetti	2545-0483	1907
7590 Harbin King & Klima 500 Ninth Street SE Washington, DC 20003				
EXAMINER				
HOOVER, MATTHEW				
ART UNIT		PAPER NUMBER		
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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

# Office Action Summary

**Application No.**

10/549,513

**Applicant(s)**

DRAGHETTI ET AL.

**Examiner**

MATTHEW HOOVER

**Art Unit**

4122

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-16 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-16 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SF/86)  
Paper No(s)/Mail Date 9/20/05
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 112***

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 1-16 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.
3. Claim 1 recites the limitation "inline storage buffer," however in the rest of the claims this is referred to as "the variable volume buffer". There is insufficient antecedent basis for the latter limitation in the claims.
4. Claim 3 recites the limitation "wall," however in the rest of the claims this term is referred to as "the moveable wall". There is insufficient antecedent basis for the latter limitation in the claim.

### ***Claim Rejections - 35 USC § 102***

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claims 1-2 and 15-16 are rejected under 35 U.S.C. 102(b) as being anticipated by Dyett et al (US 4580939).

Regarding claim 1, Dyett teaches a unit for feeding filters into a machine with feed means (figure 1 #12, 12A, 12B, 12C, 24, 26), by which the filters are fed (column 1 lines 38-40). The machine consists of a feed channel (figure 1 #18) along which the filters are advanced (column 1 lines 38-49). The feed means is connect to an outlet end of the channel (figure 2 #34A), which is connected to a dispensing hopper (figure 1 #34) and from which are released by a fluted drum (figure 1 #10). There is also a variable volume located above the feed channel and space (figure 1 #28).

Regarding claim 2, Filters are introduced through the receiver unit (figure 1 #12) down a channel (figure 1 #12B) and down a conveyor belt (figure 1 #12C) (column 1 lines 50-59). The conveyor belt has transverse ribs on it that allow the filters to be dispersed into the space in axial or transversal directions (column 2 lines 16-23). A control means monitors the level of filters in the space. A light source (figure 1 #32 and 30) shines a beam of light through an aperature (figure 1 #14A and 14B) in the tray (figure 1 #14). When the level of filters breaks this beam the feeding unit stops the delivery of filters into the space (column 1 lines 60-68 and column 2 lines 1-6). This makes the space above the top layer of the filters and below the tray variable.

Regarding claims 15-16, the filters are directed in different directions upon entering the space (28) as discussed in the previous paragraph above.

***Claim Rejections - 35 USC § 103***

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148

USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

9. Claims 3-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dyett et al (US 4580939).

Regarding claim 3, Dyett discloses the variable volume associated with the receiving space and moving means in the rejection of claims 1 and 2 above. It also teaches that the walls of the variable space are defined by the three walls of the tray (14) and the top layer of the filters. Only the bottom wall of the filter changes while the other three remain fixed.

Regarding claim 4 and 5, figure 1 shows the variable volume space is of an elongated shape, extending above and parallel to the feed channel along which filters advance. It is limited on the underside by the level of the filters and extends to side wall.

Regarding claim 6, the bottom layer of filters rests against the side wall and can consists of a conveyor belt (figure 1 #16) controlled by a motor (figure 1 #22).

Regarding claims 7 and 12, the filters are advanced down a conveyor belt (figure 1 #16), that are controlled by pulleys (figure 2 #38 and 36), through a feed channel (18)

with transverse ribs to the space (34). There is a sensor plate (figure 2 #50) located in this space (34). The sensor plate defines the space of the reservoir (figure 2 #34). The sensor plate is connected to a block (figure 2 #52) which is attached to a spindle (figure 2 #54). The spindle is then connected to a rotary potentiometer (figure 2 #56). The sensor plate detects the level of filters in the reservoir and determines the angular position of the spindle. The position of the spindle determines the variable output controlling the motor (figure 1 #22). The motor controls the speed of the conveyor belts (figure 1 #20, 16).

Regarding claims 8 and 13, a dispensing space (figure 2 #34A) comprises means to control the level of filters. There is a sensor plate (figure 2 #50) located in this space (34). The sensor plate defines the space of the reservoir (figure 2 #34). The sensor plate is connected to a block (figure 2 #52) which is attached to a spindle (figure 2 #54). The spindle is then connected to a rotary potentiometer (figure 2 #56). The sensor plate detects the level of filters in the reservoir and determines the angular position of the spindle. The position of the spindle determines the variable output controlling the motor (figure 1 #22). The motor controls the speed of the conveyor belts (figure 1 #20, 16). The speed of the conveyor belts controls the volume of filters in the space (34 and 28) (column 2 lines 49-65).

Regarding claims 9 and 14, the variable volume space (space between tray and filters) presents two side walls that are parallel to each other and perpendicular to the bottom wall, which is the top layer of the filters (figure 1). The walls do not move but the dimensions are allowed to change by the teachings discussed in the rejection regarding

claim 1, 7 and 12 discussed above. The means control the level of filters in the space and thus vary the size of the variable space.

Regarding claims 10-11, the filters are directed in different directions upon entering the space (28) by the reasoning discussed in the rejection for claim 2 discussed above.

Dyett does not teach that the walls of the variable space are moveable.

It would be obvious to one of ordinary skill in the art at the time of the invention to make this wall moveable in order to make the device adjustable and be able to handle a variable loads of filter.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to MATTHEW HOOVER whose telephone number is (571)270-7663. The examiner can normally be reached on Monday-Friday, 8am-5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Milton Cano can be reached on (571)272-1398. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/MH/  
Patent Examiner AU4122

/Milton I. Cano/  
Supervisory Patent Examiner, Art Unit 4122